

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims

1. (Cancelled)
2. (Previously presented) A method for treating a disorder, disease or condition benefiting from an increase in mitochondrial respiration; wherein the disorder, disease or condition is selected from the group consisting of obesity, diabetes, and impaired glucose tolerance, comprising administering to a patient in need thereof a therapeutically effective amount of a compound having a slope calculated from the equation

$$X^n = (Y_2 - Y_0) / (Y_1 - Y_0)$$

wherein

$Y_0$  is the degree of stimulation measured as counts per minute (cpm) of radioactivity in control samples without added test compound,

$Y_1$  is the degree of stimulation measured as cpm of radioactivity with added test compound in a concentration of  $EC_{50}/2$ ,

$Y_2$  is the degree of stimulation measured as cpm of radioactivity with added test compound in concentration of  $2 \times EC_{50}$ , and

X is 2,

or

$Y_1$  is the degree of stimulation measured as cpm of radioactivity with added test compound in a concentration of  $EC_{50}/3$ ,

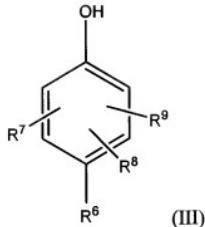
$Y_2$  is the degree of stimulation measured as cpm of radioactivity with added test compound in concentration of  $3 \times EC_{50}$ , and

X is 3,

n is the slope,

wherein,

the value of the slope n calculated for the compound is less than the value of the slope n calculated for carbonylcyanide p-trifluoromethoxy-phenylhydrazone as test compound; and wherein the compound is of formula (III)



wherein

R<sup>6</sup> is halogen, -CHO, -CO<sub>2</sub>R<sup>43</sup>, -COR<sup>43</sup>, -SO<sub>3</sub>H, -CCl<sub>3</sub>, -CF<sub>3</sub>, -CN, -CH=CH-R<sup>44</sup>, -C(R<sup>44</sup>)(R<sup>45</sup>), -SOR<sup>43</sup>, -SO<sub>2</sub>R<sup>43</sup> or aryl substituted with from one to five substituents selected from halogen, -CHO, -CO<sub>2</sub>R<sup>43</sup>, -COR<sup>43</sup>, -SO<sub>3</sub>H, -CCl<sub>3</sub>, CF<sub>3</sub>, -NO, NO<sub>2</sub>, -CN, -CH=CH-R<sup>44</sup>, -C(R<sup>44</sup>)(R<sup>45</sup>), -SOR<sup>43</sup>, or -SO<sub>2</sub>R<sup>43</sup>, wherein

R<sup>43</sup> is hydrogen or alkyl; and

R<sup>44</sup> and R<sup>45</sup> independently of each other are halogen, -CHO, -CO<sub>2</sub>R<sup>46</sup>, -COR<sup>46</sup>, -SO<sub>3</sub>H, -CCl<sub>3</sub>, -CF<sub>3</sub>, -NO, -NO<sub>2</sub>, -CN, -SOR<sup>46</sup>, -SO<sub>2</sub>R<sup>46</sup>, wherein

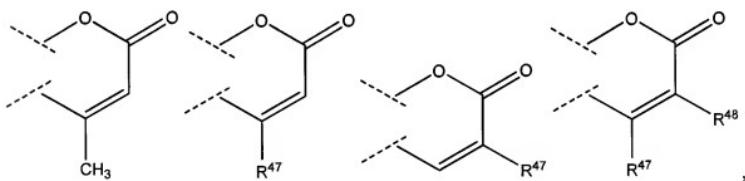
R<sup>46</sup> is hydrogen, alkyl, or aryl;

R<sup>7</sup> is alkyl, nitro, halogen, alkyl-O-, alkyl-C(O)-, or alkyl-C(O)-O-; and

R<sup>8</sup> and R<sup>9</sup> independently of each other are hydrogen, alkyl, nitro, halogen, alkyl-O-, alkyl-C(O)-, alkyl-C(O)-O-, or aryl;

or

R<sup>7</sup> and R<sup>8</sup> together form one of the diradicals



wherein R<sup>47</sup> and R<sup>48</sup>, independently of each other, are hydrogen, alkyl, nitro, halogen, alkyl-O-, alkyl-C(O)-, or alkyl-C(O)-O-,

wherein the two valence atoms in the diradical are attached to adjacent carbon atoms in the phenyl ring; and

R<sup>9</sup> is hydrogen, alkyl, nitro, halogen, alkyl-O-, or alkyl-C(O)-;

or a pharmaceutically acceptable salt, or solvate thereof.

3. (Cancelled)
  4. (Cancelled)
  5. (Previously presented) A method according to claim 2, wherein the condition is obesity.
  6. (Previously presented) A method according to claim 2, wherein the disease is type 2 diabetes.
  7. (Original) A method according to claim 6, wherein the patient in need thereof is obese.
- 8-13. (Cancelled)
14. (Previously presented) A method according to claim 2, wherein the compound is a chemical uncoupler.
  15. (Previously presented) A method according to claim 2, wherein the compound is a cation.
  16. (Cancelled)
  17. (Currently Amended) A method according to claim 2 for treating a disorder, disease or condition benefiting from an increase in mitochondrial respiration; wherein the disorder, disease or condition is selected from the group consisting of obesity, diabetes, and impaired glucose tolerance, comprising administering to a patient in need thereof a therapeutically effective amount of a compound having a slope calculated from the equation

$$X^n = (Y_2 - Y_0) / (Y_1 - Y_0)$$

wherein

$Y_0$  is the degree of stimulation measured as counts per minute (cpm) of radioactivity in control samples without added test compound.

$Y_1$  is the degree of stimulation measured as cpm of radioactivity with added test compound in a concentration of  $EC_{50}/2$ .

$Y_2$  is the degree of stimulation measured as cpm of radioactivity with added test compound in concentration of  $2 \times EC_{50}$ , and

X is 2,

or

$Y_1$  is the degree of stimulation measured as cpm of radioactivity with added test compound in a concentration of  $EC_{50}/3$ ,

$Y_2$  is the degree of stimulation measured as cpm of radioactivity with added test compound in concentration of  $3 \times EC_{50}$ , and

X is 3,

n is the slope,

wherein,

the value of the slope n calculated for the compound is less than the value of the slope n calculated for carbonylcyanide p-trifluoromethoxy-phenylhydrazone as test compound, wherein the compound is 4-hydroxy-3-nitroacetophenone.

18-49. (Cancelled)